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2013 Annual Meeting of the Coast Defense Study Group St. Babs XXXI

Harbor Defenses of Pensacola and Mobile Bay
April 24 to 28, 2013

Mark Berhow

The CDSG headed to Florida in 2013 to visit harbor defenses previously visited back in 1994. Since then, there have been some significant changes, especially as the result of Hurricane Ivan, a category-3 storm that struck the area in September 2004.

National Park Service Ranger David Ogden organized the conference with the help of Terry McGovern. David has spent much of his park service career at the Fort Pickens units of Gulf Islands National Seashore. The organizing crew did a great job of setting up the meeting.

The Pensacola area has a long military history, much of it tied to use of the bay as a key port. Being two of the few deep-water ports along the Gulf, Pensacola and to a lesser extent Mobile Bay were key locations in the European colonization of the area. In 1698, the Spanish established a permanent settlement in the area along with the first of three presidios. The area changed hands several times - captured by the French in 1719, returned to the Spanish in 1722, turned over to the British in 1763, then recaptured by the Spanish in 1781. The War of 1812 and its aftermath brought the Americans to Pensacola in 1813, 1814, and in 1818. Finally, the remaining portion of Spanish Florida that included Pensacola was transferred to the United States in 1821. The Spanish, French, and British built a number of forts in the area along the gulf coast, including a masonry water battery commanding the entrance to Pensacola bay - Bateria de San Antonio, later incorporated into the American Fort Barrancas.

In 1825 the US Government approved the establishment of a navy yard at Pensacola. Construction began in 1826 and the yard soon became one of the best equipped in the country. The

Fortification Board (established in 1816) selected a number of sites for the defense of Pensacola, ultimately building four brick Third-System works to protect the bay and the navy yard—Fort Pickens on the western tip of Santa Rosa Island, Fort McRee on the eastern tip of Perdido Key, Fort Barrancas (at the site of the older Spanish fort) and an “advanced redoubt” to guard the landward access to the peninsula with the navy yard. Over at Mobile Bay, two brick forts were built to guard the entrance to the bay, Fort Morgan on the east and Fort Gaines on the west. The forts were essentially completed by the early 1840s. In 1859, an additional fort was begun on Ship Island, Mississippi, to guard the deep-water anchorage there used by the British fleet in 1814 to stage their attack on New Orleans.

The Pensacola and Mobile forts saw a great deal of action during the Civil War. After Alabama and Florida seceded from the Union in January 1861, state forces marched on the Pensacola and Mobile military facilities. The Mobile forts quickly surrendered, but the army garrison in Pensacola consolidated its loyal personnel at Fort Pickens, abandoning Fort Barrancas, Fort McRee, and the naval station to the secessionists. After a Confederate attempt to take Fort Pickens that October failed, the position of the Confederate forces in the area soon became untenable, and they retreated from the area. By May 1862 Pensacola was under Union control. Mobile Bay, however, remained Confederate until Union army and navy forces attacked the defenses at the entrance to the bay in August 1864. The naval forces dashed past Fort Morgan on August 5, losing only one warship to an underwater mine. Fort Gaines surrendered to besieging army forces on August 8, Fort Morgan held out to siege and bombardment until August 23; but the city of Mobile was not taken until the final days of the war. The brick forts were all repaired in the years following the war, but had fallen into disrepair, like most American seacoast fortifications, by the mid-1880s.

New defenses were built at Pensacola and Mobile under the Endicott program, beginning in the mid-1890s. New concrete gun batteries and mine systems were installed at Fort Pickens, Fort McRee, Fort Morgan, and Fort Gaines. Fort Barrancas did not

receive modern breechloading guns, but a new garrison cantonment was constructed next to the old brick fort. The construction of fire control stations and searchlight facilities followed.

The Pensacola and Mobile defenses were the location of seacoast fortification tests and trials by the army. A new fire control program based on coordinated base stations was evaluated at Pensacola in the early 1900s, resulting in the first official fire control system based on triangulation (the "Barrancas" fire control system). The effect of battleship fire on seacoast batteries was evaluated on a specifically-built test battery at Fort Morgan in 1916, and the effect of seacoast batteries on ships was evaluated by the shelling of the obsolete battleship *Massachusetts* by the guns at Fort Pickens and two railroad guns brought in for the test in 1920. The posts were recruitment centers during World War I. After the war, a new 12-inch long-range battery was completed at Fort Pickens. In 1924 the defenses of Mobile Bay were ordered abandoned. The 1940 Modernization program brought two new 6-inch batteries to the Pensacola defenses, and during the war, ad-



Fort Pickens seaward face



The exposed casemates of Fort Pickens



Interior casemates of Fort Pickens

ditional AA guns, 90 mm guns, and 155 mm guns were brought to Pensacola (155 mm guns were brought to Fort Morgan). The garrison facilities were upgraded at Fort Barrancas and temporary facilities were built at Fort Pickens and Fort McRee.

In 1947, the army decided to close the defense mission at Pensacola and Mobile Bay. Much of the military property around Pensacola was transferred to the navy. The Fort Morgan reservation was turned over to the State of Alabama and the Fort Gaines reservation was turned over to a local board, which currently administers the area at the county government level. In the early 1970s, excess military lands and other public lands around Pensacola were transferred to the National Park Service, which created a new national park—the Gulf Islands National Seashore. The park holdings include most of the old seacoast defenses around Pensacola Bay, as well as Fort *Massachusetts* on West Ship Island, Mississippi.

Hurricanes have devastated the Pensacola area many times. Several early Spanish settlements were struck by hurricanes in the 1700s and 1800s, and hurricanes have struck the area nearly every decade in recent times. The most recent ones were Hurricane Ivan, which came ashore in September of 2004, and Hurricanes Dennis and Katrina in 2005. Ivan flooded the National Park Service (NPS) facilities at Fort Pickens, and both Ivan and Dennis breached the road that leads to Fort Pickens. It took a couple of years to rebuild the road and regain access to the site. Storm surges continue to cause problems for the Fort Pickens road, often causing temporary road closures. Hurricane Katrina completely washed over Ship Island and Fort *Massachusetts*, destroying the NPS facilities on West Ship Island, scouring the parapet, and peeling 280 feet of granite lintels from the south side of the fort, all since repaired by the NPS.

I for one looked forward to seeing the changes that had occurred in the defenses in the past 19 years since I had last visited.

The group gathered at the Pensacola Airport Hampton Inn on Wednesday afternoon, April 24. Rain sprinkled during the day and evening. The group gathered in the hotel conference room amid the lobby reconstruction and after the hotel happy hour. David Ogden provided an overview of the next days' events, followed by two presentations.

Thursday: Fort Pickens

After a short mornings commute, the group gathered at the parking lot next to the Third-System work. After a brief overview and group photograph, the group scattered to spend the morning visiting the large brick fort, with Battery Pensacola (2 x 12 in DC) on the old parade of the fort. The brick fort has been altered by the destruction of one of the bastions in 1899 and some modification of the seaward side of the parapet for firing Battery Pensacola. The nice thing about the Third-System work at Pickens is the ability to see aspects of the construction of the fort exposed by these alterations. As far as I could tell there were no visible effects of the hurricane at the main reservation. We were able to visit all parts of the fort, as well as the remaining mine facilities (store house, loading room, dynamite storehouse). Next within the seawall area we visited several buildings, Battery Payne (2 x 3 in Ped), Battery Trueman (2 x 3 in Ped), a 90 mm gun battery, and Battery Van Swearingen (2 x 4.7 in Ped).



8-inch Rodman on barbette tier of Fort Pickens



Landward defenses of Fort Pickens



Battery Pensacola



Torpedo storehouse, Fort Pickens



Interior of mine loading building, Fort Pickens



Battery Trueman Fort Pickens

The group then gathered around Battery Cullum-Sevier (4 x 10 in DC, modified later for a signal station and the guns of Battery Trueman moved in the 1940s) for an official once-over of the site. The battery site was recently completely cleared of vegetation in anticipation of our visit and a potential management decision on what to do with the site in order to remove the fence around it.

The battery is in rather poor shape, due to neglect and some rather shoddy construction. Several of the platform extensions have fallen/are falling down. The NPS is looking to do what it



Battery Cullem-Sevier

can to stabilize the structure and make it safe for visitors. The key will be recommendations as to what is historic and unique about the structure, which will impact how much of it will be restored or stabilized as opposed to being removed or buried. The battery has a number of unique features. It is one of the very earliest concrete batteries (begun in 1895) and features a very early ammunition handling system. Modifications for adding ammunition hoists and larger gun platforms can be clearly seen. After the guns were removed from the battery, the structure was reused as a signal station and a relocated 3-inch battery. One relatively rare Taylor-Raymond hoist system still remains in the battery. I hope that CDSG can formulate some guidance to the team that decides what to do with this battery. Also noted by several folks in attendance, the NPS could look at the state of Battery Bowyer at Fort Morgan, a four-gun 8-inch battery built around the same time, for some ideas of how to do stabilization.

In the afternoon, we finished visiting the remaining batteries and sites around the reservation. Battery 234 with its two 6-inch shielded barbette guns and the battery commander's station tower behind, Battery Cooper (2 x 6 in DC) with its very nice M1903 disappearing carriage and gun, the four 155 mm Panama mounts in front, Battery Worth (8 x 12 in BLM) that was modified for the Harbor Entrance Command Post during WWII, and finally Battery Langdon (2 x 12 in BCLR), the case-mated 12-inch battery. At the last two stops we were joined by the deputy superintendent of the park. Hopefully we were able to give him a good impression about our group and our passion for historical preservation.



Battery 234



Battery Cooper



Battery Worth

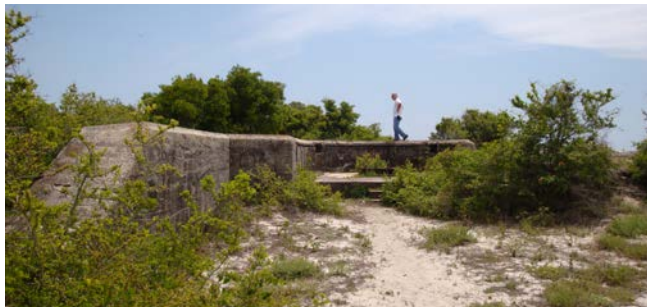


Battery Langdon

We returned to the hotel for an evening of presentations and an overview of our more leisurely schedule for the next day.

Friday: Fort McRee, Fort Barrancas, Advanced Redoubt

On Thursday night we divided up into small groups for transportation to the tip of Perido Key (Fort McRee) by boat. The plan was for the groups to be staggered, arriving at the marina in half-hour increments, but we soon ran into scheduling problems when the boat's prop became entangled with a rope, causing a one-hour delay. It was soon sorted out and all the groups got out to Fort McRee.



Battery Center, Fort McRee



Battery 233, Fort McRee

The brick fort originally built on the site was partially destroyed by bombardments in November of 1861 and January of 1862, and was not repaired after the war. Shore erosion and storm damage eventually eradicated all remains of the brick fort and nothing of it remains today. Two Endicott-period batteries (Slemmer, 2 x 8 inch DC, and Center, 4 x 3 inch MP) were built surrounded by a seawall, but they were disarmed by the mid-1920s. These batteries were filled in and leveled to accommodate the construction of WWII BCN 233 (2 x 6 in SBC) and a cantonment area. The seawall, the top of Battery Slemmer, the partial remains of Battery Center, and the cantonment buildings foundations and concrete floors remain in the dunes. BCN 233 is obscured by trees and scrub brush, but otherwise intact, similar to many other 200-series batteries around the US.

Returning to the marina, our little group headed over to the "Advanced Redoubt," a Third-System fort built to guard the landward approach to the Warrenton (Pensacola) Navy Station. Not technically an "advanced redoubt" in a classical sense, this square fortification surrounded by a dry moat and a counterscarp gallery was designed as a bastion for defending infantry to hold out against an enemy infantry/artillery attack. The NPS has done a great job of restoring the fortification to pretty much



Advanced Redoubt

its original appearance. This interior of this site is only open on special occasions.

Next stop of the day was Fort Barrancas. The Third-System engineers designed a brickwork fort to replace the Spanish/English earthwork. This secured the rear approach to the fort as well as providing an additional barbette tier firing platform. The old Spanish water battery was rebuilt and connected to the main fort by a tunnel. Again the National Park Service has done an excellent job over the years of repairing and maintaining the fort. One can wander through the whole fort and see all aspects. The park service maintains a small visitor center near the fort, which is open during regular hours most days.

After a short stop at the marvelous Naval Air Museum we headed back into town where we gathered at a local steakhouse for our annual banquet, and then back to our hotel conference room for the annual business meeting and a few more presentations.



Fort Barrancas



Large barracks, Old Fort Barrancas

Saturday: Fort Gaines and Fort Morgan

The group headed out early to caravan to Fort Morgan State Park. We had to get there early enough to catch the 10 AM ferry over to Dauphin Island for our morning visit to Fort Gaines. Fort Gaines is an interesting Third-System work, one of two American seacoast fortifications built with a Carnot Wall for close-in infantry defense, as well being expendable to clear the way for close in artillery fire. The group was greeted by a small volunteer staff that provided Civil War-era musket and field artillery drills, followed by a blacksmith demonstration. The park is funded mostly by donations and county park revenue, and seems to be



Fort Gaines



Field Artillery demonstration, Fort Gaines

doing well. The fort is in very good shape and we could wander around nearly everywhere. The original fort was modified inside for Endicott-era Battery Stanton (2 x 6 in M1897 DC, 1 x 6 in M1903 DC - the third DC emplacement was built four years after the first two emplacements), and the CRF station for he 6-inch battery was built on one of the Third-System fort bastions. Battery Terrett (2 x 3 in BP, 1 x 3 in Ped) is located just outside the older fort. Again, a very nice fort to visit for the shape it is in and for the unique features of the Third-System work.

The 12:30 ferry brought us back over to Fort Morgan. We gathered at the visitors center so that we could go inside Battery Duportail (2 x 12 in DC), then we were set loose to walk around the magnificent Third-System work. The fort was extensively repaired after being bombarded and captured by the Federals in 1864, and some modification was done to the work. The fort received an extensive set of protective glacis around the sea and bay sides, which only allowed guns to be fired from the barbette



Fort Morgan



Fort Morgan

level. The lower casemates were also designed for larger guns, but the counterscarp backing of the glacis appears to block their fire. Besides Battery Duportail, there are two smaller flanking Endicott batteries, Battery Thomas (2 x 4.7 in Armstrong Peds) and Battery Schenck (2 x 3 in BP and 1 x 3 in Ped). Around the reservation were a few buildings (a couple, most notably a barracks, had been destroyed by Ivan). Further east on the reservation were Battery Bowyer (2 x 8 in M1894 DC, 2 x 8 in M1896 DC), the ruins of a peace magazine, and Battery Dearborn (8 x 12 in BLM). Battery Dearborn is a marked contrast to Battery Worth at Fort Pickens, as its pits are significantly larger. The final stop of the day was at the "Experimental Battery" on the eastern edge of the



155 mm GPF gun and carriage



Battery Schenck



Battery Bowyer

reservation, now in a nature preserve. The emplacement was built in 1915 and mounted a 10-inch gun on a DC carriage. In 1916 two of the most modern battleships in the US Navy fired on the battery, at increasingly close range. Remarkably little damage was done to the battery, showing the DC batteries were still relevant at that time. The battery is partially exposed in an area of sand dunes, along with one of the elevating arms from the carriage. A counterweight for a disappearing searchlight lies just east of the battery as well.

With another set of talks that evening, the meeting officially closed. A few intrepid adventurers were planning on driving out to the ferry to visit West Ship Island and the Third-System Fort



Experimental Battery, Fort Morgan

Massachusetts. Although the weather report did not bode well, they were rewarded with a ranger-led tour of the fort. Some either before or after the meeting visited some of the forts around New Orleans, and still others paid a call on the Battleship USS *Alabama* near Mobile.

The meeting was a great success; I am sure all 47 who attended had a great time and were able to see all the defensive structures that made up the defenses of these two harbors. A great deal of thanks goes to David Ogden for being the point man and making the arrangements to visit all the forts and for the boat trip out to Fort McRee. David notes he appreciated the help and support of Terry McGovern in putting this together. The CDSG would like to thank the folks at the Fort Pickens and Fort Barrancas park units, our boat pilots Rick Keller and Carol Christman, the folks at Fort Gaines Park, and Walter Brewer at Fort Morgan State Park for all their help. See you all next year in San Diego and Los Angeles!

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CDSG Conference Computer Projectors

Mark Berhow

I now have a couple of projectors that I will be providing for the CDSG to use at their conferences. One is quite small and easily brought along in luggage for the meetings I have to fly to or it can be shipped to meeting organizer if I cannot attend. I am trying to keep our group up to date in the presentation business! However, I did find that my latest laptop did not have a CD/DVD disc drive and I have to remember to bring one with me next time for the folks that are still using that technology.

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A Visit to Fort Mercer, New Jersey

Charles H. Bogart

In August of 2013 I visited Fort Mercer, a Revolutionary War earthen fort at National Park, NJ, across the Delaware River from Philadelphia. Fort Mercer claims to be one of the few American forts to sink an enemy warship. The fort was named in honor of Brig. Gen. Hugh Mercer who was killed at the Battle of Princeton.